



October 2006

Critical Lift Plan Form

PART A. - MANDATORY

Job # / WO #: _____ Project Name: _____
 Date Prepared: _____ Location: _____
 Date of Lift: _____ Specific Location: _____
 Contractor: _____ Item to be lifted: _____

DO NOT LEAVE ANY BLANK SPACES ON THIS FORM!

Part B "Critical Lift Plan" shall be prepared for any of following conditions (indicate Yes or NO):

- a) When required by Tampa Electric Yes No
- b) When required by Contractor Yes No
- c) When required by contract document Yes No
- d) For Multiple Crane lifts Yes No
- e) For Personnel lifts. Yes No
- f) When the gross load is greater than 75% of the crane's rated gross capacity Yes No
(See page 5 for crane percentage chart)
- g) When the load is of a nature that would be difficult to replace due to cost or delay Yes No
- h) For other reasons: _____ Yes No

Is Part "B" Lift Plan required? ----- Yes No
 (Answer is Yes if any of the above are marked Yes, otherwise no other action is necessary.)

"Ground Condition Report" specific to the lift area will be required if any of the following conditions occur:

- i) When required by Tampa Electric Company. Yes No
- j) When required by Contractor. Yes No
- k) When required by contract document. Yes No

Is a Ground Condition Report for Lift Plan required? ----- Yes No
 (Answer Yes if any of the above is Yes.)

The Crane Competent Person for this jobsite is:

Print Name _____ Assigned by: _____

Note: The Crane competent Person will receive a copy of the entire lift plan and maintain a file for those plans.

Part A "Preliminary Lift Plan" is reviewed and agreed to by the following: _____

	<i>Date</i>	
Tampa Electric Representative: _____	<i>Print Name</i>	<i>Signature</i>
Primary Contractor: _____	<i>Print Name</i>	<i>Signature</i>
Sub-Contractor: _____	<i>Print Name</i>	<i>Signature</i>
Crane Competent Person: _____	<i>Print Name</i>	<i>Signature</i>
Other: _____	<i>Print Name</i>	<i>Signature</i>
<i>Company Name</i>	<i>Print Name</i>	<i>Signature</i>

PART B Required? Yes No

Job No.: _____ Project Name: _____
Date Prepared: _____ Location: _____
Date of Lift: _____ Specific Location: _____
Contractor: _____ Item to be lifted: _____

DO NOT LEAVE ANY BLANK SPACES ON THIS FORM!

LIFT PLAN CAN ONLY BE ACTED UPON WHEN IT IS COMPLETED IN FULL, ELECTRONICALLY PRODUCED, RECEIVES A FINAL REVIEW AND IS APPROVED.

LIFT PLAN MUST BE DISCUSSED, REVIEWED AND UNDERSTOOD BY THE CRANE LIFT TEAM WHO MUST AGREE WITH ALL SECTIONS THEREOF.

LIFT PLAN MUST BE READILY AVAILABLE FOR ANY PERSON ON THE CRANE LIFT TEAM OR JOBSITE TO REVIEW.

<u>Drawing or Document</u>	<u>Yes / No</u>	<u>Drawing or Document Identification and #</u>
Plan View of Job Site:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Plan View of Lift Site:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Elevation View of Lift Site:	<input type="checkbox"/> Yes	_____
Ground Condition Report:	<input type="checkbox"/> Yes	_____
Load Weight Information:	<input type="checkbox"/> Yes	_____
Rigging Assembly:	<input type="checkbox"/> Yes	_____
Load Capacity Chart, Crane #1:	<input type="checkbox"/> Yes	_____
Load Capacity Chart, Crane #2:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ <i>(If No, explain:)Only using one crane</i>
Other (provide description):	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Other (provide description):	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____

(Yes only options are mandatory documents)

Plan View of Job site, to include routing for cranes, trucks and other essential vehicles.

Plan View of Lift Site, to include initial load placement, intermediate load placement and final load placement locations. This view must show the crane swing path including tail-swing and all nearby structures.

Elevation View of Lift Site, to include the crane and its boom, jib and counterweight configuration, load, rigging, all nearby structures and overhead obstructions.

Ground Condition Report, for mobile crane locations.

Load Weight Information, to include dimensions, c/g, weight and all load attachment points.

Rigging Assembly, to include all rigging gear and slings required.

Load Capacity Chart, for each crane, complete with boom composition and line pull information.

CRANE LIFT TEAM The following persons are identified as the "Crane Lift Team":

LIFTING EQUIPMENT

Identify lifting equipment required and hazards at the lifting site.

Mobile Crane? Yes No If Yes, Identify Type _____

2nd Mobile Crane? Yes No If Yes, Identify Type: _____

Overhead Crane? Yes No If Yes, Identify Type: _____

Winch/Tugger/Jacks? Yes No If Yes, Identify Type: _____

Other Lifting Device (specify)? Yes No If Yes, Identify Type: _____

More lifting devices required? Yes No How Many? _____

Identify 2nd Lifting Device: _____ Identify 3rd Lifting Device: _____

Are underground utilities present? Yes No

Type & Depth of Utility: Surveyed and information supplied by TECO _____

Fire or Explosion Hazards within crane reach? Yes No Type of Hazard: _____

Control measures planned: _____

Electrical Hazards within crane reach? Yes No

Voltage & Distance Present: _____

Control measures planned: _____

CRANE #1

Mobile Crane #1 Configuration

Crane Type: Crawler Truck All Terrain Rough Terrain Boom Truck Other

Crane Manufacturer: _____ Crane Owner: _____

Crane Model Number: _____ Crane Serial Number: _____

Current Periodic Inspection Date: _____ Maximum Allowable Wind Speed _____ *mph*

Type of Boom: Lattice Telescopic Main Boom Length: _____

Is Lattice Boom composition correct: Yes No Jib/Extension Length: _____

Lift will be on: Main Boom Jib Accessories on Crane: _____

Other Attachments to Crane: _____ Other: _____

Hoist Rope: Main Auxiliary Rope Capacity: # of Parts: ____ Line Pull: _____

Boom Angle: _____ Radius: _____

Gross Crane Boom Capacity: _____

Gross Load Weight for Crane #1

Load Block: _____ lbs. How is weight verified? _____

Main Hoist Rope: _____ lbs. How is weight verified? _____

Auxiliary Block or Hook: _____ lbs. How is weight verified? _____

Auxiliary Hoist Rope: _____ lbs. How is weight verified? _____

Jib Weight: Stowed Erected _____ lbs. How is weight verified? _____

Other Attachments to Crane Boom: _____ lbs. How is weight verified? _____

Spreader Bar: _____ lbs. How is weight verified? _____

Slings & Shackles: _____ lbs. How is weight verified? _____

Other: _____ lbs. How is weight verified? _____

Other: _____ lbs. How is weight verified? _____

Load Weight: _____ lbs. How is weight verified? _____

Gross Load Weight: _____
(Total of all weights listed above)

Maximum Boom Capacity Percentage: _____
(Gross Load Weight ÷ Crane Boom Capacity)

Maximum Rope Capacity Percentage: _____
(Gross Load Weight ÷ Rope Capacity)

Crane Capacity Percentage Chart for Crane #1

Load Locations	Required (yes or No)	Radius	Boom Angle	Boom Length	Boom Gross Cap. (BC)	Main Boom Capacity % (GL / BC)	Rope Gross Cap. (RC)	Rope Capacity % (GL / RC)
Initial Location								
1st Intermediate Location	__ Yes __ No							
2nd Intermediate Location	__ Yes __ No							
3rd Intermediate Location	__ Yes __ No							
Final Placement Location								
Gross Load Weight (GL): _____			Maximum Percentages:					

Tailing Load Operation

Is Tailing of the Load Required? Yes No

If a tailing operation is required, then complete the following Crane Load Summary Charts for the lifting and tailing cranes.

Complete the following crane load summary chart for the primary lifting crane (Crane #1) to determine the percentages of gross capacity throughout the tailing operation.

Crane Load Summary Chart for Primary Lift Crane (Crane #1)

Primary Lift Crane		Moment Positions				
		A	B	C	D	E
1	Moment					
2	Rigging					
3	Attachments					
4	Gross Load Weight					
5	Radius					
6	Crane Capacity					
7	% of Gross Capacity					

Formula for computing the moments during tailing for the lifting crane is $(D1 / TD) \times \text{weight} = \text{moment}$ for the lifting crane
Distance from Lift lug to C.G. (center of gravity) = D1
Distance from Tail lug to C.G (center of gravity) = D2
D1 plus D2 = TD (total distance)

MOBILE CRANE #2

Is a 2nd Crane Required? Yes No

Mobile Crane #2 Configuration

Crane Type: Crawler Truck All Terrain Rough Terrain Boom Truck Other

Crane Manufacturer: _____ Crane Owner: _____

Crane Model Number: _____ Crane Serial Number: _____

Current Periodic Inspection Date: _____ Maximum Allowable Wind Speed: _____ mph

Type of Boom: Lattice Telescopic

Is Lattice Boom composition correct: Yes No

Lift will be on: Main Boom Jib

Other Attachments to Crane: _____ Other: _____

Hoist Rope: Main Auxiliary

Boom Angle: _____ Rope Capacity: # of Parts: ____ Line Pull: _____

Radius: _____

Gross Crane Boom Capacity: _____

Gross Load Weight for Crane #2

Load Block:	_____ lbs.	How is weight verified?	_____
Main Hoist Rope:	_____ lbs.	How is weight verified?	_____
Auxiliary Block or Hook:	_____ lbs.	How is weight verified?	_____
Auxiliary Hoist Rope:	_____ lbs.	How is weight verified?	_____
Jib Weight: <input type="checkbox"/> Stowed <input type="checkbox"/> Erected	_____ lbs.	How is weight verified?	_____
Other Attachments to Crane Boom:	_____ lbs.	How is weight verified?	_____
Spreader Bar:	_____ lbs.	How is weight verified?	_____
Slings & Shackles:	_____ lbs.	How is weight verified?	_____
Other:	_____ lbs.	How is weight verified?	_____
Other:	_____ lbs.	How is weight verified?	_____
Load Weight:	_____ lbs.	How is weight verified?	_____

Gross Load Weight: _____
(Total of all weights listed above)

Maximum Boom Capacity Percentage: _____
(Gross Load Weight ÷ Crane Boom Capacity)

Maximum Rope Capacity Percentage: _____
(Gross Load Weight ÷ Rope Capacity)

Crane Capacity Percentage Chart for Crane #2

Load Locations	Required (yes or No)	Radius	Boom Angle	Boom Length	Boom Gross Cap. (BC)	Main Boom Capacity % (GL / BC)	Rope Gross Cap. (RC)	Rope Capacity % (GL / RC)
Initial Location								
1st Intermediate Location	__ Yes __ No							
2nd Intermediate Location	__ Yes __ No							
3rd Intermediate Location	__ Yes __ No							
Final Placement Location								
Gross Load Weight (GL): _____			Maximum Percentages:					

Tailing Load Operation

If a tailing operation is required, then complete the following Crane Load Summary Chart.

Complete the following crane load summary chart for the tailing crane (Crane #2) to determine the percentages of gross capacity throughout the tailing operation.

Crane Load Summary Chart for Tailing Crane (Crane #2)

Tailing Crane	Moment Positions				
	A	B	C	D	E
1 Moment					
2 Rigging					
3 Attachments					
4 Gross Load Weight					
5 Radius					
6 Crane Capacity					
7 % of Gross Capacity					

Formula for computing the moments during tailing for the tailing crane is $(D2 / TD) \times \text{weight} = \text{moment}$ for the tailing crane
 Distance from Lift lug to C.G. (center of gravity) = D1
 Distance from Tail lug to C.G (center of gravity) = D2
 D1 plus D2 = TD (total distance)

COMMENTS

APPROVAL

Part B "Critical Lift Plan" is reviewed and agreed to by the following:

_____ *Date*

Tampa Electric Representative:

_____ *Print Name*

_____ *Reviewer Signature*

Primary Contractor:

_____ *Print Name*

_____ *Approver Signature*

Sub-Contractor:

_____ *Print Name*

_____ *Approver Signature*

Crane Competent Person:

_____ *Print Name*

_____ *Approver Signature*

Rigging Competent Person:

_____ *Print Name*

_____ *Approver Signature*

Other:

_____ *Company Name*

_____ *Print Name*

_____ *Reviewer or Approver Signature*